

# Investigator<sup>®</sup> Human Identification PCR Kits

The QIAGEN portfolio of multiplex PCR human identification kits offers the most comprehensive and versatile coverage of current international STR standards. These include the European Standard Set (ESS), Combined DNA Index (CODIS), other non-standard loci and unique gonosomal loci. The kits are well suited for use in molecular forensics, paternity and kinship analyses, as well as cell line identification. The following tables summarize the kit markers by standard and dye color.

Table 1. Markers of the Investigator Human Identification PCR Kits by international standard

		Investigator 24plex QS Kit*	Investigator 24plex GO! Kit†	Investigator ESSplex SE QS Kit	Investigator ESSplex SE GO! Kit†	Investigator ESSplex Plus Kit	Investigator 10Dplex Plus Kit	Investigator 10Dplex GO! Kit	Investigator Triplex DSF Kit	Investigator Triplex AF5 QS Kit	Investigator 10Dplex Kit	Investigator Argus X-12 QS Kit	Investigator Argus Y-12 QS Kit	Investigator 10Dplex Kit
<b>Amelogenin</b>	AM	AM	AM	AM				AM	AM	AM			AM	
<b>Quality Sensor</b>	QS1, QS2	QS1, QS2						QS		QS		QS		
<b>International Standards</b>	20 CODIS core loci (Harris et al., 2015) <sup>1</sup> 12 ESS core loci	D1S1656	D1S1656	D1S1656						D12S391				
		D2S441	D2S441	D2S441										
		D10S1248	D10S1248	D10S1248										
		D12S391	D12S391	D12S391										
		D22S1045	D22S1045	D22S1045										
		D3S1358	D3S1358	D3S1358		D3S1358	D3S1358	D3S1358						
		D8S1179	D8S1179	D8S1179		D8S1179	D8S1179	D8S1179						
		D18S51	D18S51	D18S51		D18S51	D18S51	D18S51						
		D21S11	D21S11	D21S11		D21S11	D21S11	D21S11						
		TH01	TH01	TH01		TH01	TH01	TH01						
		vWA	vWA	vWA		vWA	vWA	vWA						
		FGA	FGA	FGA		FGA	FGA	FGA	FGA	FGA				
		D2S1338	D2S1338	D2S1338		D2S1338	D2S1338	D2S1338						
		D19S433	D19S433	D19S433		D19S433	D19S433	D19S433						
		D16S539	D16S539	D16S539		D16S539	D16S539	D16S539						
		D5S818				D5S818	D5S818	D5S818						
		D7S820				D7S820	D7S820	D7S820						
		D13S317				D13S317	D13S317	D13S317						
		CSF1PO				CSF1PO	CSF1PO	CSF1PO						
		TPOX				TPOX	TPOX	TPOX						
<b>Additional loci</b>	SE33 DY391	SE33					SE33	SE33	SE33					30 DIPS
										D2S1360	DXS7132	DYS19		
										D3S1744	DXS7423	DYS385		
										D4S2366	DXS8378	DYS389-I		
										D5S2500	DXS10074	DYS389-II		
										D6S474	DXS10079	DYS390		
										D7S1517	DXS10101	DYS391		
										D8S1132	DXS10103	DYS392		
										D10S2325	DXS10134	DYS393		
										D21S2055	DXS10135	DYS437		
											DXS10146	DYS438		
											DXS10148	DYS439		
											HPR1B			

\* NDIS approved, for reference see [www.fbi.gov](http://www.fbi.gov). † Investigator ESSplex SE GO! does not contain QS1 and QS2.

Table 2. Autosomal STR markers of the Investigator Human Identification PCR Kits by dye color

Locus	Chromosomal mapping	Label dye								
		Investigator 2Aplex QS Kit	Investigator 2Aplex GOI Kit	Investigator ES5plex Plus Kit	Investigator ES5plex SE QS Kit	Investigator ES5plex SE GOI Kit	Investigator IDplex Plus Kit	Investigator IDplex GOI Kit	Investigator HDplex Kit	Investigator Triplex DSF Kit
Amelogenin	Xp22.1–22.3, Yp11.2	6-FAM™	6-FAM	6-FAM	6-FAM	6-FAM				6-FAM
QS2		BTP		6-FAM						
D1S1656	1q42	BTG	BTG	BTG						
D2S441	2p14	BTR2	BTR	BTR						
D2S1338	2q35	BTY	BTG	BTY	BTG					
D3S1358	3p25.3	6-FAM	6-FAM	6-FAM	6-FAM			6-FAM		
D2S1360	2p24-p22						6-FAM			
D3S1744	3p24						6-FAM			
D4S2366	4p16-15.2						6-FAM			
D5S2500	5q11.2						BTG			
D5S818	5q23.2	BTP			BTG					
D6S474	6q21-22						6-FAM			
D7S820	7q21.11	BTP			BTG					
D8S1132	8q23.1						BTG			
D7S1517	7q31.33						6-FAM			
D8S1179	8q23.1–23.2	BTY	BTG	BTY	BTR					
D10S1248	10q26.3	BTY	BTY	BTY						
D10S2325	10p12						BTY			
D12S391	12p13.2	BTG	BTY	BTY			6-FAM			
D13S317	13q31.1	BTP			BTY					
D16S539	16q24.1	BTP	BTG	BTG	BTY					
D18S51	18q21.3	BTR2	BTR	BTR	BTR	BTG				
D19S433	19q12	BTY	BTG	BTG	BTG					
D21S11	21q21.1	6-FAM	6-FAM	6-FAM	6-FAM					
D21S2055	21q22						BTG			
D22S1045	22q12.3	BTY	BTY	BTY						
FGA (FIBRA)	4q28.2	BTR2	BTY	BTR	BTR		HEX	6-FAM		
SE33 (ACTBP2)	6q14.2	BTG		BTG		BTY	6-FAM	6-FAM		
TH01 (TC11)	11p15.5	6-FAM	6-FAM	6-FAM	6-FAM					
vWA	12p13.31	6-FAM	6-FAM	6-FAM	6-FAM					
TPOX	2p25.3	BTG			BTG					
CSF1PO	5q33.1	BTP			BTY					
DYS391	Yq11.21	BTG								
QS1		BTP		6-FAM						

**Table 3. X-chromosomal STR markers of the Investigator Argus X-12 QS Kit by dye color**

*Investigator Argus  
X-12 QS Kit*

Locus	Chromosomal mapping	Label dye
Amelogenin	Xp22.1-22.3, Yp11.2	6-FAM
QS1	—	6-FAM
DXS7132	Xq11.2	BTG
DXS7423	Xq28	BTY
DXS8378	Xp22.31	6-FAM
DXS10074	Xq12	BTG
DXS10079	Xq12	BTY
DXS10101	Xq26.2	6-FAM
DXS10103	Xq26.2	6-FAM
DXS10134	Xq28	6-FAM
DXS10135	Xp22.31	BTG
DXS10146	Xq28	BTY
DXS10148	Xp22.31	BTR
HPRTB	Xq26.2	BTR
D21S11	21q21.1	BTR

**Table 4. Y-chromosomal STR markers of the Investigator Argus Y-12 QS Kit by dye color**

*Investigator  
Argus Y-12 QS Kit*

Locus	Chromosomal mapping	Label dye
QS	—	6-FAM
DYS19	Yp11.2	BTG
DYS385	Yq11.222	6-FAM
DYS389-I	Yq11.21	BTG
DYS389-II	Yq11.21	BTG
DYS390	Yq11.221	6-FAM
DYS391	Yq11.21	BTG
DYS392	Yq11.222	BTY
DYS393	Yp11.31	BTY
DYS437	Yq11.21	6-FAM
DYS438	Yq11.21	BTY
DYS439	Yq11.21	6-FAM

#### References

1. Hares, D. R. (2015) Selection and implementation of expanded CODIS core loci in the United States. *Forensic Sci. Int. Genet.* **17**, 33–34.

## Ordering Information

Product	Contents	Cat. no.
Investigator 24plex QS Kit (100)*†	Primer Mix, Fast Reaction Mix 2.0, Control DNA, Allelic Ladder 24plex, DNA Size Standard 550 (BTO) and Nuclease-Free Water	382415
Investigator 24plex GO! Kit (200)*†	Primer Mix, Fast Reaction Mix 2.0, Control DNA, Allelic Ladder 24plex, DNA Size Standard 550 (BTO) and Nuclease-Free Water	382426
Investigator ESSplex Plus Kit (100)*†	Primer Mix, Fast Reaction Mix, Control DNA, Allelic Ladder ESSplex Plus, DNA Size Standard 550 (BTO) and Size Standard	381535
Investigator ESSplex SE QS Kit†	Primer Mix, Fast Reaction Mix 2.0, Control DNA, Allelic Ladder ESSplex SE QS, DNA Size Standard 550 (BTO) and Nuclease-Free Water	381575
Investigator ESSplex SE GO! Kit (200)*†	Primer Mix, Fast Reaction Mix, Control DNA, Allelic Ladder ESSplex SE GO! DNA Size Standard 550 (BTO) and Nuclease-Free Water	381566
Investigator IDplex Plus Kit (100)*†	Primer Mix, Fast Reaction Mix, Control DNA, Allelic Ladder IDplex Plus, DNA Size Standard 550 (BTO) and Nuclease-Free Water	381625
Investigator IDplex GO! Kit (200)*†	Primer Mix, Fast Reaction Mix, Control DNA, Allelic Ladder IDplex GO! DNA Size Standard 550 (BTO) and Nuclease-Free Water	381636
Investigator Triplex DSF Kit (400)*	Primer Mix, Reaction Mix, DNA Polymerase, Control DNA, Allelic Ladder Triplex DSF, DNA Size Standard, and Nuclease-Free Water	380327
Investigator Triplex AFS QS Kit (400)*	Primer Mix, Reaction Mix, DNA Polymerase, Control DNA, Allelic Ladder Triplex AFS, DNA Size Standard and Nuclease-Free Water	380317
Investigator HDplex Kit (100)*	Primer Mix, Reaction Mix, DNA Polymerase, Control DNA, Allelic Ladder HDplex, DNA Size Standard and Nuclease-Free Water	381215
Investigator Argus X-12 QS Kit†	Primer Mix, Fast Reaction Mix 2.0, Control DNA, Allelic Ladder Argus X-12 QS, DNA Size Standard 550 (BTO) and Nuclease-Free Water	383223
Investigator Argus Y-12 QS Kit (100)*	Primer Mix, Reaction Mix, DNA Polymerase, Control DNA, Allelic Ladder Argus Y-12 QS, DNA Size Standard and Nuclease-Free Water	383615
Investigator DIPlex Kit (100)	Primer Mix, Reaction Mix, DNA Polymerase, Control DNA, Allelic Ladder DIPlex, DNA Size Standard and Nuclease-Free Water	384015

\* Not available in all countries; please inquire.

† Larger kit sizes available; please inquire.

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